Claim Amendments

(Original) A buffer for noise rejection in a logic circuit comprising:
an input node;

an output node;

a first inverter coupled to the input node, the first inverter having a first device size;

a second inverter coupled to the first inverter and the output node, the second inverter having a second device size at least six times greater than the first device size.

- 2. (Original) The buffer of claim 1 wherein the first and second inverters each comprise CMOS devices.
- 3. (Original) The buffer of claim 1 wherein the second device size is approximately ten times larger than the first device size.
- 4. (Original) The buffer of claim 1 wherein a ratio of the first device size to the second device size is in a range between 1:8 and 1:22.
- 5. (Original) A computer-aided method for design of a logic network comprising:

extracting parametric information from a layout of the logic network; analyzing the logic network to identify a crosstalk-induced glitch at a node of a signal path in the logic network;

inserting a buffer at the node that functions to suppress a magnitude of the crosstalk-induced glitch, the buffer including first and second inverters coupled in



series, the first and second inverters respectively having a device size ratio of 1:6 or larger.

- 6. (Original) The computer-aided method according to claim 5 wherein the parametric information includes capacitance and resistance along the signal path of the logic network.
- 7. (Original) The computer-aided method according to claim 5 wherein the first and second inverters comprise CMOS devices.
- 8. (Original) The computer-aided method according to claim 5 wherein the device size ratio is in a range between 1:8 and 1:22.
- 9. (Original) The computer-aided method according to claim 5 wherein the device size ratio is approximately 1:10.
- 10. (Original) The computer-aided method according to claim 5 wherein the parametric information further includes timing slack available at the node of the signal path.
- 11. (Original) The computer-aided method according to claim 10 wherein the buffer has an associated delay that is smaller than the timing slack available at the node of the signal path.
- 12. (Original) The computer-aided method according to claim 5 wherein the node comprises an input of a logic state device.

- 13. (Original) The computer-aided method according to claim 12 wherein the logic state device comprises a flip-flop.
- 14. (Original) The computer-aided method according to claim 12 wherein the logic state device comprises a latch.
- 15. (Original) The computer-aided method according to claim 12 wherein the logic state device comprises a register.
- 16. (Original) A computer-aided method for design of a logic network comprising:

identifying a crosstalk-induced glitch at an input node of a logic state device in a signal path of the logic network, the crosstalk-induced glitch having a magnitude sufficient to disturb a logic level at the input node;

inserting a buffer in the signal path at the input node so as to suppress the magnitude of the crosstalk-induced glitch, the buffer including first and second inverters coupled in series, the first and second inverters respectively having a device size ratio of 1:6 or larger.

- 17. (Original) The computer-aided method according to claim 16 wherein the logic state device comprises a flip-flop.
- 18. (Original) The computer-aided method according to claim 16 wherein the logic state device comprises a latch.
- 19. (Original) The computer-aided method according to claim 16 wherein the logic state device comprises a register.



- 20. (Original) The computer-aided method according to claim 16 wherein the first and second inverters comprise CMOS devices.
- 21. (Original) The computer-aided method according to claim 5 wherein the device size ratio is in a range between 1:8 and 1:22.
- 22. (Original) The computer-aided method according to claim 5 wherein the device size ratio is approximately 1:10.
- 23. (Original) The computer-aided method according to claim 5 further comprising:

determining a timing slack figure at the input node, the buffer having an associated timing delay that is smaller than the timing slack.

24. (Original) A computer-readable storage medium having a configuration that represents data and instructions that cause a processor to:

extract parametric information from a layout of a logic network;

analyze the logic network to identify an input node of a logic state device in a signal path of the logic network where a crosstalk-induced glitch occurs;

modify the layout by insertion of a buffer in the signal path at or just prior to the input node, the buffer including first and second inverters coupled in series, the first and second inverters respectively having a device size ratio of 1:6 or larger.

25. (Original) The computer-readable storage medium according to claim 24 wherein the logic state device comprises a flip-flop.



- 26. (Original) The computer-readable storage medium according to claim 24 wherein the logic state device comprises a latch.
- 27. (Original) The computer-readable storage medium according to claim 24 wherein the logic state device comprises a register.
- 28. (Original) The computer-readable storage medium according to claim 24 wherein the device size ratio is in a range between 1:8 and 1:22.
- 29. (Original) The computer-readable storage medium according to claim 24 wherein the device size ratio is approximately 1:10.

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